



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/621,905	07/17/2003	Thomas N. Corwin	COR22 P-301	2135
277	7590	05/09/2006	EXAMINER	
PRICE HENEVELD COOPER DEWITT & LITTON, LLP 695 KENMOOR, S.E. P O BOX 2567 GRAND RAPIDS, MI 49501			HORTON, YVONNE MICHELE	
			ART UNIT	PAPER NUMBER
			3635	

DATE MAILED: 05/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding..

<b>Office Action Summary</b>	<b>Application No.</b> 10/621,905	<b>Applicant(s)</b> CORWIN, THOMAS N.	
	<b>Examiner</b> Yvonne M. Horton	<b>Art Unit</b> 3635	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 22 March 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Amendment***

Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 13 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 13 recites that the "skylight is mounted on and between two rafters...comprised of plastic members having a plurality of openings"; however, Figure 4 shows and the specification on page 8 details that "at least an upper portion of the rafters is replaced by a ventilation grid...designed in such a way that it may be fastened to the rafters by screws". The specification does not detail that the skylight is mounted on the plastic ventilation grid that has a plurality of apertures, but rather on rafter sections (44A,44C) with a section 44B located between (4A,44C) removed to accommodate the skylight 54. Clarification and correction is required. Until receipt of clarification, the claims have been examined both ways, as the rafters themselves being made from plastic and having a plurality of apertures and as portions of rafter members being plastic and having a plurality of apertures.

### ***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent #6,401,412 to COOPER in view of US Patent #5,561,952 to DAMRON and US Patent #5,848,512 to CONN or US Patent #4,126,973 to LUCKEY. COOPER discloses a roof structure (10) including a plurality of rafters (16,40) having a plurality of openings (56) spaced from a roof deck (34) thereby to provide an air gap (58), column 7, lines 3-6 and an insulation (32) therebetween and away from the interior ceiling (30), and a vent (24) that allows for air flow from the air gap (58). COOPER discloses the basic claimed roof structure except for the rafters being made from plastic and except for the inclusion of a skylight. DAMRON teaches that it is known in the art to provide a roof with a skylight (10,70). Regarding the issue of plastic rafters or rafter portions, CONN teaches that it is known in the art to form rafters/beam members (10) out of plastic material, column 3, line 16, with a plurality of apertures (20); and LUCKEY teaches that it is known in the art to form rafter portions (7) out of plastic, column 4, lines 33-34, having a plurality of apertures (34). It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the roof of COOPER with the skylight of DAMRON, and to form the rafter out of plastic, as taught by CONN, or to have rafter portions formed out of plastic, as taught by LUCKEY, in order to increase the structural integrity of the building while further allowing the structure to be illuminated by natural sunlight on its interior, and also enhancing the air flow throughout the roof and the entire structure. The use of plastic rafters decreases the amount of corrosion and


deterioration of the components of the building structure but maintains the structural stability and rigidity of the structure. When corrosion is no longer a factor, the building will have a longer life span and will be more cost efficient in that the likelihood of having to replace or maintain elements of the building is decreased.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yvonne M. Horton whose telephone number is (571) 272-6845. The examiner can normally be reached on 6:30 am - 3:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl D. Friedman can be reached on (571) 272-6842. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Yvonne M. Horton  
Art Unit 3635  
5/4/06